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10/672,095	09/26/2003	Moon-Jung Choi	P2033US	7091

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EXAMINER
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PRABHAKHER, PRITHAM DAVID

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/672,095

Applicant(s)

CHOI ET AL.

Examiner

Pritham Prabhakher

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/12/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-17, 21-23 and 25-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueno (US Pub No.: 2002/0037747A1).**

*In regard to Claim 1, Ueno teaches of a digital camera (Paragraph 0004)*

*comprising:*

*an optical system (The photographic lens group includes an optical lens group, Paragraph 0010),*

*an optoelectric converter (The imaging device 14 acts as an optoelectric converter in converting the optical image captured, Paragraph 0025),*

*a recording medium (Storage medium 120, Paragraph 0023),*

*a display (Image display 28 and LCD display 54, Paragraphs 0027 and 0030),*

*and*

*a digital signal processor including the capability of displaying a transceiving state of data files being transmitted to an external device or being received from an external device (Looking at Figure 1, the system control 50 acts as the digital signal processor that displays a transceiving state (state of data being transmitted and received) from an external device. The states are shown in Figures 6-9 and the system*

*control circuit 50 is designed to execute the processes shown in Figures 6-9,*

***Paragraph 0060).***

*With regard to **Claim 2**, Ueno teaches of the digital camera of claim 1, wherein the digital camera further comprises:*

*a communication interface capable of transmitting data files to an external device and receiving data files from an external device (Interface 128 from Figure 1 is the interface capable of transmitting and receiving data file from an external device,*

***Paragraphs 0036 and 0037).***

*In regard to **Claim 3**, Ueno teaches of the digital camera of claim 2, wherein the digital signal processor includes the capability of displaying an initialization state of the communication interface (An initialization ("Communicating") state is displayed on the image display 28, **Figure 9 and Paragraph 0078).***

*Regarding **Claim 4**, Ueno teaches of the digital camera of claim 1, wherein the digital signal processor includes the capability of displaying an electrical connection state between the digital camera and an external device as shown in Figure 9, steps S805 and S807.*

*Regarding **Claim 5**, Ueno teaches of the digital camera of claim 1, wherein the digital signal processor further includes the capability of monitoring the transceiving state of data files being transmitted to an external device or being received from an external device (**See Figure 11).***

*In regard to **Claim 6**, Ueno teaches of the digital camera of claim 1, wherein the external device is a computer (It is possible to transfer the image data from the camera to an external device such as a computer, **Paragraphs 0004 and 0037**).*

*With regard to **Claim 7**, Ueno teaches of the digital camera of claim 1, wherein the display is an LCD panel (Both the displays 28 and 54 are LCD displays, **Paragraphs 0027 and 0030**).*

*Regarding **Claim 8**, Ueno teaches of the digital camera of claim 1, wherein the recording medium is removable from the camera (The recording medium 120 is removable from the camera as shown in Figure 3).*

*In regard to **Claim 9**, Ueno teaches of the digital camera of claim 1, wherein the recording medium comprises solid state memory (**Paragraphs 0023 and 0037**).*

*With regard to **Claim 10**, Ueno teaches of a digital camera comprising:  
an optical system (The photographic lens group includes an optical lens group, **Paragraph 0010**),*

*an optoelectric converter (The imaging device 14 acts as an optoelectric converter in converting the optical image captured, **Paragraph 0025**),*

*a recording medium (Storage medium 120, **Paragraph 0023**),*

*a display (Image display 28 and LCD display 54, **Paragraphs 0027 and 0030**),*

*and*

*a communication interface capable of transmitting data files to an external device and receiving data files from an external device (Interface 128 from Figure 1 is the*

*interface capable of transmitting and receiving data file from an external device,*

***Paragraphs 0036 and 0037), and***

*a digital signal processor including the capability of displaying an initialization state of the communication interface (Looking at Figure 1, the system control 50 acts as the digital signal processor that displays a transceiving state (state of data being transmitted and received) from an external device. The states are shown in Figures 6-9 and the system control circuit 50 is designed to execute the processes shown in Figures 6-9, Paragraph 0060. An initialization ("Communicating") state is displayed on the image display 28, Figure 9 and Paragraph 0078).*

*In regard to Claim 11, Ueno teaches of the digital camera of claim 10, wherein the digital signal processor includes the capability of displaying an electrical connection state between the digital camera and an external device as shown in Figure 9, steps S805 and S807.*

*In regard to Claim 12, Ueno teaches of the digital camera of claim 11, wherein the digital signal processor further includes the capability of displaying a transceiving state of data files being transmitted to an external device or being received from an external device (Looking at Figure 1, the system control 50 acts as the digital signal processor that displays a transceiving state (state of data being transmitted and received) from an external device. The states are shown in Figures 6-9 and the system control circuit 50 is designed to execute the processes shown in Figures 6-9, Paragraph 0060).*

Regarding **Claim 13**, Ueno teaches of the digital camera of claim 10, wherein the communication interface is a USB interface (The communication interface can function as a USB interface, **Paragraph 0037**).

With regard to **Claim 14**, Ueno teaches of a digital camera comprising:

- a means for creating a digital photograph (The photographic lens group includes an optical lens group for capturing an optical image of an object. An imaging device 14 converts the optical image captured into an electric signal. An A/D converter 16 converts the analog signal from device 14 into a digital signal, **Paragraph 0010**),
- a means for storing digital image data (The digital image data can be stored in storage medium 120, **Paragraph 0023**),
- a means for displaying data (The data can be displayed on image display 28, **Paragraph 0027**), and
- a means for displaying a transceiving state of data files being transmitted to an external device or being received from an external device (Looking at Figure 1, the system control 50 acts as the digital signal processor that displays a transceiving state (state of data being transmitted and received) from an external device. The states are shown in Figures 6-9 and the system control circuit 50 is designed to execute the processes shown in Figures 6-9, **Paragraph 0060**).

In regard to **Claim 15**, Ueno teaches of the digital camera of claim 14, further comprising:

*a means for transmitting data files to an external device and receiving data files from an external device (Interface 128 from Figure 1 is the interface capable of transmitting and receiving data file from an external device, **Paragraphs 0036 and 0037**), and*

*a means for displaying an initialization state of the means for transmitting data files to an external device and receiving data files from an external device (An initialization ("Communicating") state is displayed on the image display 28, **Figure 9 and Paragraph 0078**).*

*In regard to **Claim 16**, Ueno teaches of the digital camera of claim 14, wherein the digital signal processor includes the capability of displaying an electrical connection state between the digital camera and an external device as shown in Figure 9, steps S805 and S807.*

*Regarding **Claim 17**, Ueno teaches of a method for monitoring the status of a digital camera, the method comprising:*

*displaying an initialization state while initializing a communication interface (An initialization ("Communicating") state is displayed on the image display 28 while the camera is setting up a communication/initialization with an external device, **Figure 9 and Paragraph 0078**).*

*Regarding **Claim 21**, Ueno teaches of the method of claim 17, further comprising:*



*displaying a transceiving state while transmitting a data file to or from an external device (Looking at Figure 1, the system control 50 acts as the digital signal processor that displays a transceiving state (state of data being transmitted and received) from an external device. The states are shown in Figures 6-9 and the system control circuit 50 is designed to execute the processes shown in Figures 6-9, **Paragraph 0060**).*

*With regard to **Claim 22**, Ueno teaches of the method of claim 21, wherein the step of displaying a transceiving state while transmitting a data file to or from an external device further comprises:*

*determining whether a data file is being transmitted (Figures 6-9 and 11 show the determining of whether a data file is being transmitted), and*

*displaying a message indicating status of transmission of a data file (Figure 11 shows a display of the data files being transmitted).*

*In regard to **Claim 23**, Ueno teaches of the method of claim 22, wherein the step of displaying a transceiving state while transmitting a data file to or from an external device further comprises:*

*determining whether initialization of the communication interface is successful (**Paragraph 0079** teaches that a determination is made as to the completion of communication/initialization),*

*if initialization of the communication interface is successful (If the communication process is completed normally, S523 in Figure 7), proceeding with the step of displaying a transceiving state while transmitting a data file to or from an external device (Data is*

*then transmitted and the results of the data being transmitted are displayed on the display 28, **Figures 6-9 and 11, Paragraphs 0078 and 0099-0102**, and*

*if initialization of the communication interface is not successful (If the communication process is not completed normally, S523 in Figure 7), terminating the step of displaying a transceiving state while transmitting a data file to or from an external device (If the initialization of the communication interface is not completed normally, the contents of the error are displayed on the display screen 28, **Figures 6-9 and Paragraph 0063**).*

*With regard to **Claim 25**, Ueno teaches of the method of claim 17, further comprising:*

*repeating the step of displaying a transceiving state while transmitting a data file to or from an external device until an end signal is input (Looking at **Figures 6 and 7**, until the end signal (mode completed S513) is input, the step of displaying a transceiving state (state of data being transmitted and received) from an external device will be repeated.*

*In regard to **Claim 26**, Ueno teaches of the method of claim 17, further comprising:*

*displaying an unloaded state after the digital camera is unloaded from an external device (The unloaded state is viewed as a state in which communication is not possible and the words "Communication Impossible (Device None) is displayed on the image display 28, **Paragraph 0076**).*

With regard to **Claim 27**, Ueno teaches of the method of claim 26, wherein the step of displaying an unloaded state after the digital camera is unloaded from an external device comprises:

determining whether an unloaded signal is input to the digital camera (If a device is not able to communicate with the camera and does not exist (S802), an unloaded signal is input to the camera to display the message S807, **Figure 9**), and

if an unloaded signal is input, displaying a message indicating unloaded state of digital camera (If the unloaded signal is input (no device exists to communicate with the camera), S807 is displayed on the camera to indicate the unloaded state, **Figure 9**).

Regarding **Claim 28**, Ueno teaches of the method of claim 27, wherein the step of displaying an unloaded state after the digital camera is unloaded from an external device comprises:

determining if the digital camera is disconnected from the external device (S511 in **Figure 6**),

if the digital camera is not disconnected from the external device (No in **S11 in Figure 6**), repeating the step of displaying an unloaded state after the digital camera is unloaded from an external device (When No under Mode Completed is selected, the steps of **Figure 6** repeat again, and at S503 in **Figure 6** and at S522 at **Figure 7** and then at S802 in **Figure 9**, once the digital camera is unloaded (communication is broken) from an external device, S807 is displayed again).

In regard to **Claim 29**, Ueno teaches of a method for monitoring the status of a digital camera, the method comprising:

*displaying a transceiving state while transmitting a data file to or from an external device (Looking at Figure 1, the system control 50 acts as the digital signal processor that displays a transceiving state (state of data being transmitted and received) from an external device. The states are shown in Figures 6-9 and the system control circuit 50 is designed to execute the processes shown in Figures 6-9, **Paragraph 0060**).*

*With regard to **Claim 30**, Ueno teaches of the method of claim 29, wherein the step of displaying a transceiving state while transmitting a data file to or from an external device further comprises:*

*determining whether a data file is being transmitted (Figures 6-9 and 11 show the determining of whether a data file is being transmitted), and*

*displaying a message indicating status of transmission of a data file (Figure 11 shows a display of the data files being transmitted).*

*In regard to **Claim 31**, Ueno teaches of the method of claim 30, wherein the step of displaying a transceiving state while transmitting a data file to or from an external device further comprises:*

*determining whether initialization of a communication interface is successful (**Paragraph 0079** teaches that a determination is made as to the completion of communication/initialization),*

*if initialization of the communication interface is successful (If the communication process is completed normally, S523 in Figure 7), proceeding with the step of displaying a transceiving state while transmitting a data file to or from an external device (Data is*

*then transmitted and the results of the data being transmitted are displayed on the display 28, **Figures 6-9 and 11, Paragraphs 0078 and 0099-0102**, and*

*if initialization of the communication interface is not successful (If the communication process is not completed normally, S523 in Figure 7), terminating the step of displaying a transceiving state while transmitting a data file to or from an external device (If the initialization of the communication interface is not completed normally, the contents of the error are displayed on the display screen 28, **Figures 6-9 and Paragraph 0063**).*

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueno (US Pub No.: 2002/0037747A1) as applied to Claim 17 above.**

*Regarding **Claim 18**, Ueno teaches of the method of claim 17, wherein the step of displaying an initialization state while initializing a communication interface comprises:*

*monitoring a connection between the digital camera and an external device (S501 in **Figure 6**),*

*waiting until the connection is complete before proceeding with initialization and display of the initialization state (The connection is complete when no error occurs at S502, **Figure 6**. Initialization and display of the initialization state only takes place if there is no error),*

*initializing the communication interface and displaying a message indicating the initializing of the communication interface (An initialization ("Communicating") state is displayed on the image display 28 while the camera is setting up a communication/initialization with an external device, **Figure 9 and Paragraph 0078**),*

*determining whether the initialization is successful (**Paragraph 0079** teaches that a determination is made as to the completion of communication/initialization), and*

*However, Ueno does not teach that if the initialization succeeds, displaying a message indicating the success of the initialization. It would have been obvious to one of ordinary skill in the art at the time of the invention to display that an electrical connection has been made in order to determine that communication/initialization has been completed between the two devices because this lets the user know that all data was successfully transferred.*

*Regarding **Claim 19**, Ueno teaches of the method of claim 18, wherein the step of displaying an initialization state while initializing a communication interface further comprises:*

*if the initialization fails, displaying a message indicating the failure of the initialization (If the initialization/communication fails, as in S522 is not completed normally (S523), the error message is displayed, **Paragraph 0063 and Figures 6,7 and 9).***

*With regard to **Claim 20**, Ueno teaches of the method of claim 18, wherein the step of displaying an initialization state while initializing a communication interface further comprises:*

*if the initialization fails, displaying a message offering guidance to remedy the failure (If the initialization/communication fails, as in S522 is not completed normally (S523), the contents of the error are displayed, **Paragraph 0063 and Figures 6,7 and 9.** The contents of the error can be used as a guidance to remedy the failure).*

**Claims 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueno (US Pub No.: 2002/0037747A1) as applied to Claims 17,21,22 ,29 and 30 and further in view of Venturino et al. (US Patent No.: 7106375B2)**

*Regarding **Claims 24 and 32**, Ueno teaches of the method of claims 22 and 30, wherein the step of displaying a transceiving state while transmitting a data file to or from an external device further comprises:*

*determining the type of interface (It is inherent that the type of interface in use would have to be determined since each device (the camera and the external device)*

*would have a separate interface. Therefore, in order to separate the interface of the camera from the external interface, an inherent determination must be made).*

*However, Ueno does not teach of displaying a message indicating the type of interface being used. Venturino teaches of a camera with a display that indicates the type of memory card (interface) being used (304 and 306 in **Figures 3 and 6 of Venturino**). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate into the teachings of Ueno a display that indicated what type of interface (memory card) was in use so that the user can know what data is being transmitted since there is more than one device present.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pritham Prabhakher whose telephone number is 571-270-1128. The examiner can normally be reached on M-F (7:30-5:00) Alt Friday's Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pritham David Prabhakher  
Patent Examiner  
[Pritham.Prabhakher@uspto.gov](mailto:Pritham.Prabhakher@uspto.gov)

A handwritten signature in black ink, appearing to read 'Lin Ye', with a stylized, flowing script.

**LIN YE**  
PRIMARY PATENT EXAMINER